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Title: POLYMERIC PLATE FOR BONY ATTACHMENT

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Summary: "POLYMERIC PLATE FOR BONY ATTACHMENT", idealized in order to speed up the reconstitution and bone configuration, avoiding a rejection, providing a better stabilization, avoiding its removal and minimizing in some cases, the loss of mobility for patients, characterized to be constituted of polymeric plate (1), to be used in bone attachment surgeries, being produced from polymer synthetic oil of mamona (ricinus comunis); biocompatible, osteoinductive and semi-rigid, being able to receive a conformation of various forms, in diverse sizes and thickness, according to the necessity and place of application, and containing holes (2) adequately distributed in all extension, in order to promote a better attachment, through a screw.

POLYMERIC PLATE FOR BONY ATTACHMENT

The present described report, deals with Patent application of design of utility for "POLYMERIC PLATE FOR BONY ATTACHMENT", having as objective, new characteristic presentation, exclusive and functional, developed to be employed as plate for bony attachment in orthopedic, trauma logic, neurological surgery of the skull, jawbone, facial and various bone fractures, emphasized to be produced from polymer synthetic oil of mamona (ricinus comunis), biocompatible and osteoinductive of semi-rigid constitution, turning unnecessary the removal of the same through a second surgery, attending the requirements of the utility and satisfying the technical conditions referent to the strength, security, practicality, quality of performance, in way of characterizing it a design of low costs for its industrial feasibility, capable of attending the requirements and real necessities of the market.

They are very well known, the plates of bony attachments conventionally made in metallic material, which apart from heavy and rigid, subject the patient to a second surgery, for removal, because they act as a strange body inside of the organism, generating some inconvenience, for example a metalose (degenerated from metal).

As it is known, in cases where its removal is not convenient, for motives of stabilization, given the rigidity of the metal, the patient near loses from 60% to 70 % of their mobility, in cases of cervical column surgery.

It was thinking of a cure for inconveniences as stated above as well as others, that it was created the design of "POLYMERIC PLATE FOR BONY ATTACHMENT", for the petitioner, searching, as a result of various studies, to provide a solution technically correct and functional, of highly good taste in its plastic configuration and of great performance, with the intention to offer trustworthiness and to provide improvements, promoting and personalizing among its species, for the fact the it is a plate for bone attachment, produced from polymer of synthetic oil of mamona, biocompatible and osteoinductive, not showing its rejected phenomenon, possessing a minor weight and the advantage of being semi-rigid constitution, elaborated according to the desired format, aiming at a better adaptation to the place of application, and this being endowed of holes, which serve to allow the attachment of the plate to the bone or through screws.

Another important characteristic of the design, is that in cases where it is desired to preserve a mobility of the patient, as in the cervical column surgeries, the polymeric plates, due to its semi-rigid constitution, allows the patient to have a minimum loss of mobility of the order of 10% to 20%, besides possessing the advantage of avoiding a second surgery for its removal, being biocompatible and osteoinductive.

With this there is a design of high efficiency, speeding the recovery of the patients, avoiding them to subject to a new surgery, promoting a better stabilization of the bone and providing the patient a better mobility.

The present patent, it is remarkable for its structural and functional simplicity, offering the user, the efficient and additional option in the market of species.

Following is a detailed explanation of the design to better elucidate the report description, following the annexed drawings in which make the following references:

Figure 1: Vision in perspective, exemplifying some designs of polymeric plates, to be used in the bony attachment.

In accordance with the illustration and in its details, the POLYMERIC PLATE FOR BONY ATTACHMENT however considered, constitute of a polymeric plate (1), to be used in bone attachment surgeries, being the one produced from polymer synthetic oil of mamona (ricinus comunis): biocompatible, since it does not show the phenomenon of rejection; osteoinductive, since it ends up being involved and contain holes (2), distributed adequately through out its extension, in order to promote a better attachment to the patient's bone, through the meanings of a screw; avoiding a second surgery for the removal of the same, since it does not occur of metabolic phenomenon; and semi-rigid, providing a better stability for the bone reconstitution, and minimizing the loss of the mobility of the patient, in cases of column cervical surgery, that passes to be of the order of 10% to 20%. Dealing with a polymeric plate (1) that could receive a conformation of various forms, in diverse sizes and thickness, according with the necessity and place of application.

In accordance with the description and illustration, it deals with a new conception in "POLYMERIC PLATE FOR BONY ATTACHMENT" whose technical characteristics, constructive and functional, are completely different from these pertinent state of technique.

For its characteristics truly innovated and for the advantages that it offers, fulfilling all the requirements of newness and originality in type, the present "POLYMERIC PLATE FOR BONY ATTACHMENT", units necessary conditions to deserve the privileged of the Design and Utility.

CLAIM

1. "POLYMERIC PLATE FOR BONY ATTACHMENT", characterized for its constitution of polymeric plate(1), produced from polymer synthetic oil of mamona (ricinus comunis); biocompatible, osteoinductive and semi-rigid, being able to receive a conformations of various forms, in diverse sizes and thickness, according with the necessity and place of application, and containing holes(2), adequately distributed in all its extension, for attachment through screws.

CONCLUSION

“POLYMERIC PLATE FOR BONY ATTACHMENT”, idealized in order to speed up the reconstitution and bone formation, avoiding a rejection, providing a better stabilization, avoiding its removal and minimizing, in some cases, the loss of the mobility for a patient, characterizing to be constituted of polymeric plate(1), to be used in bone attachment surgeries, being those produced from polymer synthetic oil of mamona (ricinus comunis); biocompatible, osteoinductive and semi-rigid, being able to receive a conformation of various forms, in various sizes and thickness, according with the necessity and place of application, and containing holes(2), adequately distributed in all extensions, in order to promote a better attachment, through screws.